Forming and Solving Simple Equations

Name: _____ Date: _____

Part A: Form an Equation

Write an equation for each problem. Use the letter given for the unknown.

1. A number x increased by 7 equals 15.
Equation: _____

2. Five times a number n is 40.
Equation: _____

3. A number y divided by 3 gives 9.
Equation: _____

4. When 12 is subtracted from a number m, the result is 5.
Equation: _____

Part B: Solve the Equations

Find the value of the unknown in each equation. Show your working.

5. $x + 9 = 23$
x = _____

6. $a - 6 = 14$
a = _____

7. $4p = 32$
p = _____

8. $k \div 5 = 7$
k = _____

9. $3t + 5 = 20$
t = _____

10. $2w - 7 = 11$
w = _____

Part C: Word Problems

Form an equation and solve it to answer each question.

11. Sarah has some marbles. If she gets 8 more marbles, she will have 25 marbles altogether. How many marbles does Sarah have now?

Equation: _____
Answer: Sarah has _____ marbles.

12. A rectangle has a length of 12 cm. Its perimeter is 38 cm. What is the width of the rectangle? (Remember: Perimeter = 2 × length + 2 × width)

Equation: _____
Answer: The width is _____ cm.

13. James is thinking of a number. When he multiplies it by 6 and then adds 4, he gets 46. What is James's number?

Equation: _____

Answer: The number is _____.